

EXHIBIT AA

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

APPLE INC.
Petitioner

v.

COREPHOTONICS, LTD.,
Patent Owner

Case IPR2018-00030
U.S. Patent No. 9,857,568

**PATENT OWNER'S RESPONSE
TO PETITION FOR *INTER PARTES* REVIEW**

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by reference from one document into another document”); *see also Cisco Systems, Inc. v. C-Cation Techs., LLC*, IPR2014-00454, Paper 12 at 9 (PTAB, Aug. 29, 2014) (“This practice of citing the Declaration to support conclusory statements that are not otherwise supported in the Petition also amounts to incorporation by reference.”).

V. Level of a Person of Ordinary Skill in the Art (POSITA)

A person of ordinary skill in the art (“POSITA”) would have possessed an undergraduate degree in optical engineering, electrical engineering, or physics, with the equivalent of three years of experience in optical design at the time of the effective filing date of the ’568 patent, July 4, 2013. Ex. 2005, ¶ 14. A POSITA would not necessarily have had any experience in manufacturing lenses or optical systems. *See id.* ¶¶ 15-20.

The Petition contends that a POSITA would have “approximately three years of experience *in and/or manufacturing* multi-lens optical systems.” Pet., at 9. (emphasis added). Apple’s expert Dr. José Sasián offers a different level of skill, calling for “approximately three years of experience *in designing and/or manufacturing* multi-lens optical systems.” (Ex. 1003, ¶ 19.) However, in IPR2018-01140, in which Apple is currently challenging claims of U.S. Patent 9,402,032 (“the ’032 patent”) based upon the same Ogino prior art patent, Apple claimed that a POSITA would have “approximately three years of experience *in*

designing multi-lens optical systems.” See Ex. 2013, ¶ 19. Apple did not argue that a POSITA would have lens manufacturing experience even though the ’032 patent and ’568 patent are related by continuation-in-part and share largely identical specifications. Apple’s reference to “manufacturing” experience thus appears to be driven primarily by its argument that Ogino, which is prior art directed to lens design, should be combined with disclosures from Beich, which is an article discussing unique manufacturing issues in polymer-injection manufacturing methods for lenses.

Under either the POSITA definition in Apple’s petition or that in Dr. Sasián’s declaration, a person with lens design experience, but no lens manufacturing experience can meet the requirements to be a POSITA. Indeed, Dr. Sasián confirmed at his deposition that a person with three years of design experience and no manufacturing experience could meet his POSITA definition. Ex. 2012, 20:12-22 (July 2, 2019 Deposition of Dr. Sasián).

To the extent that Apple contends that its POSITA definition requires manufacturing experience, its definition does not accord with the experience of those of ordinary skill in the field. As Dr. Moore explains, the work of a lens *designer* does not typically overlap with that of a lens *manufacturer*, except in the way that the design and production stages of any given product would typically overlap. See Ex. 2005, ¶ 19. As Apple provided in its Petition for IPR2018-01140, a POSITA

for the subject matter disclosed would be a lens *designer* with “approximately three years of experience in *designing* multilens optical systems” (Ex. 2013, ¶ 19 (emphasis added)). The Beich reference itself notes the disjoint between engineering teams (that design lenses) and manufacturers:

From a manufacturer’s perspective many times we have encountered programs where we were given a small glimpse of what the engineering team was trying to achieve. This is often presented as a set of disembodied specifications for a particular optic. Frequently this comes in the form of a request to substitute the existing expensive glass substrate for a ‘cheaper’ plastic one. It’s not unusual to hear something like, “the specs are on the drawing, just substitute the word acrylic for the word BK-7.”

Ex. 1020, at 2; *see* Ex. 2005, ¶¶ 19, 120-21 . Beich describes the problems caused by this disjoint between *designers* and *manufacturers*: although the “lens designer . . . is probably concentrating on how the lens needs to perform in the system and rightly so,” “the lens does not exist in isolation. The rest of the system, along with the commercial aspects of future production needs, should be addressed up front so that the appropriate tooling set can be accounted for.” Ex. 1020, at 10; Ex. 2005, ¶¶ 19, 120-21 .

A POSITA for the ’568 patent, whom Apple and Corephotonics both appear agree would have the equivalent of three years of lens *design* experience, would have been unlikely to have specialized knowledge specific to the *manufacture* of lenses, which constitutes a separate field entirely. This is confirmed by the testimony of Dr. Sasián, who is Apple’s technical expert and a professor of optics design at University

of Arizona, that: (1) he could not recall any course taught by the college of optical sciences where “students obtain experience with injection molding plastic lenses”; (2) could not remember any student, in his 40 years of teaching, who had “experience [with] injection molding plastic lenses prior to the time they graduate[d];” and that (3) the last time he visited a factory where plastic lenses were being injection molded was in 2006. Ex. 2012, at 25:11-15, 26:2-27:11. Dr. Sasián could not even confirm there was a “injection molding machine” at his University. *Id.* at 26:2-7. Apple’s argument that a POSITA would have experience *manufacturing* lenses is unsupported by facts or evidence and is contradicted by Apple’s own prior art, and it should be rejected.

VI. Claim Construction

A. Legal Standard

Even if the Board were to apply the BRI standard, the Federal Circuit has cautioned that “[t]he protocol of giving claims their broadest reasonable interpretation does not include giving claims a legally incorrect interpretation divorced from the specification and the record evidence.” *In re Smith Int’l, Inc.*, 871 F.3d 1375, 1382 (Fed. Cir. 2017) (citations and internal quotations omitted). The specification must be considered, to determine whether it “proscribes or precludes some broad reading of the claim term” and to ensure that the interpretation of the claims is “not inconsistent with the specification.” *Id.* at 1383. Rather, claims must